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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/348,575	07/07/1999	CARMELO ZACCONE	Q55017	5420

7590

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EXAMINER

ABELSON, RONALD B

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 09/10/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/348,575

Applicant(s)

ZACCONE ET AL.

Examiner

Ronald Abelson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 1999.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 7, 8 and 10-15 is/are rejected.
- 7) ☒ Claim(s) 4 and 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Dobbins (US 5,751,971).

Regarding claims 1 and 5, Dobbins teaches a method and apparatus for an Internet forwarding method (fig. 2), for forwarding internet packets from a host connected to the internet (fig. 2 box 16) towards a destination host (DH) (fig. 2 box 14, col. 5 lines 47 - 52) connected to a private internet network (PNW), where said internet network (INW) and the PNW are coupled through at least one edge router (fig. 2 box 11), and where the DH is assigned a global internet address (col. 2 lines 41 - 57) characterized in that the forwarding of the internet packets is based only on the global internet address (IP datagram, col. 4 line 66 - col. 5 line 2).

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Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3, 7, and 10 - 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dobbins in view of Sosa.

Regarding claim 10, in addition to the limitations listed in claims 1 and 5, Dobbins teaches detecting if DH has been configured for internet connectivity and a global internet address has been assigned (IP work group, col. 2 lines 41 - 57, col. 5 lines 60 - 64).

Regarding claims 11 and 12, in addition to the limitations listed in claims 1 and 5, Dobbins teaches a router (fig. 2 box 12A and 12B) and an edge router (fig. 2 box 15). It is well known in the art that routers perform message reception, interpretation and forwarding.

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Although Dobbins teaches routing tables (fig. 4, col. 7 lines 31 - 34), he is silent an optimal method for updating.

Sosa teaches adjacent router notification / Open Shortest Path First (OSPF), as a means of updating the routing table/database (pg. 1057 col. 2 line 33 - pg. 1058 col. 1 line 2). In OSPF adjacent routers are notified via flooding Link State Advertisement (LSAs) (pg. 1057 col. 2 lines 35-37).

Therefore it would have been obvious to one of ordinary skill in the art, having both Dobbins and Sosa before him/her and with the teachings [a] as shown by Dobbins, an Internet forwarding means where the destination host is characterized by a global IP address, and [b] as shown by Sosa, OSPF) as a means of updating the routing table/database, to be motivated to modify the system of Dobbins by using OSPF to update the routing database. This modification can be performed in software. This would improve by providing a fast efficient means of updating. In addition OSPF is a standardized procedure set forth by the Internet Engineering Task Force, therefore it can be easily integrated with other networks.

Regarding claim 13, in addition to the limitations listed in claims 10-12, the combination of Dobbins and Sosa teaches a multicast protocol (Dobbins: col. 10 lines 25 - 29).

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5. Claims 4, 8, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dobbins as applied to claims 1 and 5 above, and further in view of Speakman (US 6,389,475).

As previously mentioned, Dobbins teaches a global address for the DH (col. 2 lines 41 - 57). Although Dobbins teaches multicasting, he is silent on the subject of constructing multicast trees.

Speakman teaches the steps of sending, constructing, and forwarding in a multicast environment (col. 4 lines 15 - 24).

Therefore it would have been obvious to one of ordinary skill in the art, having both Dobbins and Speakman before him/her and with the teachings [a] as shown by Dobbins, an Internet Forwarding Method that includes multicasting, and [b] as shown by Speakman, a method of forming multicast trees and forwarding packets along these trees, to be motivated to modify the system of Dobbins by constructing multicast trees according to the teachings of Speakman. This modification could be performed in software. This would improve the system by providing an efficient means of transporting multicast information.

Allowable Subject Matter

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6. Claim 9 is allowed.

7. Claims 2 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: Regarding claims 2, 6, and 9 nothing in the prior art teaches or fairly suggests a router daemon in combination with the other limitations of the claims.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ronald Abelson whose telephone number is (703) 306-5622. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9600.

RA
Ronald Abelson
Examiner
Art Unit 2663

RA

August 27, 2002

Chau T. Nguyen
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